

Cefla in a partnership with MIPU for a cutting-edge "predictive factory" proposal

Cefla, a leader in Italy in the field of design and construction of technological systems, global service and energy production systems, has recently signed an agreement with MIPU, a partner whose main focus is on digitization, to offer its customers cutting-edge solutions in the field of Artificial Intelligence, energy management and predictive maintenance.

The agreement is perfectly in line with the vision of Cefla as a key partner for integrated solutions in terms of design, construction and maintenance of technologically advanced systems.

Imola, Italy - 25/01/2022 - Artificial intelligence is revolutionizing the areas in which we operate as well as the processes in which we are involved. **The strength of the partnership between Cefla and MIPU lies precisely in a common background of shared intents, experiences and skills** of a large Italian industrial group - which for the past 90 years has been developing solutions to improve the well-being of the places where people live and work - and a dynamic enterprise like MIPU, which is leading the way on the digital front, and which, by leveraging the availability of an easy to integrate, modular proprietary software platform, is introducing predictive models in factories and municipalities, in order to reduce waste and costs and streamline management, enhancing existing assets.

Management in all its forms - of production, industrial or energy management plants - has always aimed to **promote efficiency, starting from the enhancement of the existing assets and ideally, in a sustainable perspective based on interconnection.** Viewing work as a sequence of interconnected steps, similar to links in a chain, implies that the improvement of any one of these links will positively impact and optimise every other link in that chain. There are three concepts underlying the so-called "predictive factory": **efficiency**, because the management of human resources, materials and financial resources can be optimised; **sustainability**, because pre-existing data are used to design new operating methods (artificial intelligence will self-improve); and **inclusiveness**, as diversity (of age, vision, gender, ethnicity) and being open to receive new inputs can actually magnify the value of an existing process.

Cefla, with MIPU, has recently developed **two new predictive maintenance platforms, C-cogenS and C-Platform**, specially designed for energy production plants and technological systems in industrial plants - respectively.

Through the IoT (Internet of Things) and the Internet (as opposed to the customer's LAN), potentially every object in an industrial plant can have its own identity in the digital world and provide operational information to the maintenance service. The whole design and engineering process then happens through digital sensors, intelligent and interconnected, which by means of free Lan protocols transmit data to a cloud platform that interacts with Cefla's and the customer's systems (if an interface is required).

*“Cefla, which is celebrating its 90th anniversary this year, through its Engineering Business Unit **deals** with the complete “turnkey” development **of project engineering, construction, installation and subsequent testing of technological, energy production and cogeneration systems.***

*C-cogenS, developed on MIPU software, is a **detailed real-time monitoring system that Cefla can make available to its customers to monitor the global efficiency of a system and of every single component.** Through this platform it is therefore possible to perform predictive maintenance on plants, as already happens in the Tor di Valle district heating plant in Rome, for the multi-utility company Acea.*

Using a data source updated in real time, through IoT technologies and searchable dashboards, it is possible to keep assets monitored, ensuring energy efficiency and lower service costs. The system is also “Customer Oriented”, fully modular to adapt to any customer needs.

*Based on the acquired expertise, Cefla and MIPU have then developed **C-Platform** for all-round management of the industrial building: it collects data in the field, integrates with existing BMS systems, and is able to store the data from all the systems to a single cloud, displaying them on advanced dashboards and communicating with its own or the customer's CMMS for the integration of scheduled maintenance plans,” says Laura Cenni, Cefla Engineering's Business Process Manager.*

“The partnership with MIPU is a major step for us, and fits perfectly into a process that we started several years ago, which involves the development of increasingly integrated and digitised proposals, in order to obtain valuable solutions for our customers and our partners. The project we have in mind requires four-handed engagement, which will allow us to fine-tune our skills and identify the actual needs of our customers, in all the areas in which we operate, whether it is production plants with our Cefla Tech, an area in which we

are investing considerable resources, or alternatively, technological systems or energy management systems. Energy management is a sector in which we have strengthened our highly sector-specific skills in recent years - with increasingly specialised solutions for the design and construction of cogeneration power plants, biomass plants and plant engineering services,” explains Massimo Milani, Managing Director of Cefla's Engineering Business Unit.

“The path undertaken with Cefla is another, critically important step reminding us of how much MIPU has grown over the past 10 years,” comments Giulia Baccarin, CEO and Co-founder of MIPU, *“and at the same time, of how much more there is for us to do. We strongly believe that we will have a significant impact on the sustainability and competitiveness of Italian industry and municipalities, an impact already measurable in the 160 customer companies that have chosen us and are growing with us every day”*

Cefla consists of 4 Business Units. Each has its own history of success, products and innovations. Yet they are all part of a shared quest for improvement in which partnerships and skills interact to generate excellence and ensure satisfaction for all its customers and stakeholders. Cefla's Engineering Business Unit, which is about to celebrate its 90th anniversary in 2022, deals in design, construction and management of technological systems in the civil and industrial sectors, and of cogeneration and trigeneration plants in the energy sector. In recent years it has poured efforts and resources into the facility management sector, as well as plant maintenance both in the civil sector and in the production sector, with a common goal: to improve the well-being and comfort of the places where people live, work and share leisure time.

In recent years, Cefla's commitment has focused strongly on the development of large-scale high-efficiency, high sustainability plants serving district heating networks that supply electricity and heat to hundreds of thousands of people, also within the scope of the Capacity Market mechanism, designed to guarantee system stability to support the expected increase in the national solar and wind energy production which, by its very nature, cannot be programmable.